

# **On the persuasiveness of similar others: The role of mentalizing and the feeling of certainty**

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Final accepted version for publication in the *Journal of Consumer Research*, to appear in the October 2015 issue. DOI: 10.1093/jcr/ucv032

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The Department of Marketing Research Fund, BI Norwegian Business School, funded this research. Helpful comments and suggestions by members of the Research on Emotion and Decisions (RED) Lab at Columbia University, and by participants at the Kortenbergh seminar of the consumer research group at the KU Leuven are gratefully acknowledged. This article is based on the first author's doctoral dissertation under the guidance of the second and third authors. Correspondence concerning this article should be addressed to Ali Faraji-Rad, Nanyang Business School, Nanyang Technological University, 50 Nanyang Avenue, Singapore 639798, Singapore (afaraji-rad@ntu.edu.sg).

Prior literature has hitherto proposed two process explanations for the positive effect of source similarity (i.e., similarity between adviser and advice-taker) on persuasion. One explanation is that similar others are perceived to have preferences that are correlated with one's own, and this makes their advice more diagnostic. The other is that similar others are liked more so people follow their advice to maintain connectedness with them. We propose a more general explanation, which incorporates the advice taker's processing goals. In order to process any advice, advice takers activate a mentalizing goal, which is to understand the adviser's mental states. Similarity creates a perception of such an understanding, and induces a feeling of certainty (i.e., a feeling of knowing), which validates the advice as a decision input, and increases persuasion. A mentalizing explanation accounts for the effect even when similarity cannot lead to perceptions of correlated preferences or to interpersonal liking. Four studies show that the effect attenuates if advice-takers are less likely to mentalize, are already primed to feel certain, or misattribute their feeling of certainty to a source other than the advice. Furthermore, the feeling of certainty emanating from similarity even influences decisions unrelated to the advice.

*Keywords:* persuasion, source similarity, feeling as information, feeling of certainty

People receive advice from others for many decisions in life. The persuasiveness of the advice depends largely on the adviser's characteristics (Wilson and Sherrell 1993), which include the adviser's general similarity to the advice-taker (i.e., source similarity). Ample prior research has demonstrated the positive effect of source similarity on persuasion (Berscheid 1966; Brock 1965; Churchill, Collins, and Strang 1975; Evans 1963; Gino, Shang, and Croson 2009; Hovland, Janis, and Kelley 1953; Jiang, Hoegg, Dahl, and Chattopadhyay 2010; Woodside and Davenport 1974). This positive effect has so far been attributed to one of two processes. First, similar others might have preferences that are correlated with one's own and this makes their advice more diagnostic (Hovland et al. 1953). Second, similar others may be liked more (Byrne 1969); thus advice takers might follow their advice to satisfy a need to maintain connectedness with them (Jiang et al. 2010).

In this research, we propose a different process by which source similarity can lead to persuasion. Specifically, we suggest that an important goal is spontaneously activated when advice takers process advice given by others. This goal is mentalizing, which is the act of trying to understand the mental states of other people (Frith and Frith 2006). We propose that, no matter the degree of similarity of the adviser, the advice-processing context creates in the advice-taker a need to understand the adviser's mental states (i.e., mentalizing goal). The adviser's similarity to the advice-taker induces in the advice-taker a perception of such an understanding, which in the presence of the mentalizing goal creates a general feeling of certainty (i.e., a feeling of knowing) (Clore and Parrot 1994). Later on, this feeling of certainty is used as information to validate the advice as a decision input (Schwarz and Clore 1983). Therefore, a similar (vs. dissimilar) adviser's persuasiveness is increased.

Our explanation of the source-similarity effect does not invalidate the prior explanations of the effect. However, our explanation accounts for the source-similarity effect in situations where the assumptions of the prior explanations do not hold. Such situations occur commonly in people's daily lives. For example, consumers often read reviews of products on retailers' websites. In such websites, although reviewers are typically anonymous, they may provide some personal information (e.g., month of birth, city of residence, etc.). Imagine a consumer who is similar to an anonymous reviewer based on month of birth, which is a non-diagnostic form of similarity that cannot lead to inferences of correlated preferences. Due to the reviewer's anonymity there is also no opportunity to create or maintain connectedness. Thus, here, the previous explanations fail to predict a positive effect of source similarity on persuasion. However, as will be seen, our explanation accounts for the source similarity effect even in such a context, when the adviser is anonymous and similarity is non-diagnostic.

In the following, we briefly review the extant research on source similarity and present our model, which is depicted in figure 1. We then provide empirical evidence for our model. Finally, we discuss the implications of our findings for persuasion research and theory.

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## **PRIOR RESEARCH ON SOURCE SIMILARITY**

Early empirical evidence for the source-similarity effect came from field studies among salespeople (Brock 1965; Churchill et al. 1975; Evans 1963; Gadel 1964), where similarity between the salesperson and the client was observed to increase persuasion. The first explanation proposed for the effect was that, because the advice-taker sees the preferences of the adviser as

correlated to his or her own, advice from a similar adviser is diagnostic and consequently more persuasive (Hovland et al. 1953). Consistent with this explanation, the effect attenuates when correlated preferences cannot be inferred (e.g., when similarity is irrelevant to the advice topic) (Berscheid 1966; Simon, Berkowitz, and Moyer 1970; Wyer 2010), or when having correlated preferences with the adviser is less important for the advice-taker (Gino et al. 2009; Goethals and Nelson 1973; Yaniv, Choshen-Hillel, and Milyavsky 2011).

However, the effect was also observed when similarity was in birthdays or names (Jiang et al. 2010) or when similarity was in religion and height while the advice context was insurance sales (Evans 1963). A correlated-preferences account cannot explain such observations. A second explanation was proposed to account for such observations by stating that people are motivated to connect with others they like (Baumeister and Leary 1995; Lee and Robbins 1995), so they follow the advice of similar others, whom they like more (Byrne 1969; Jiang et al. 2010).

Two conditions are necessary for this second explanation to hold. The first is that source similarity should lead to liking. Although some evidence supports the positive relationship between similarity and liking (Byrne 1961, 1969; Byrne, Clore, and Worchel 1966), other evidence suggests that the relationship may not always hold true (e.g., Dryer and Horowitz 1997; Markey, Lowmaster, and Eichler 2010; Markey and Markey 2007; Nowicki and Manheim 1991; Sunnafrank 1983; Sunnafrank and Miller 1981). The second condition is that following the adviser's advice should help satisfy the advice-taker's need for connectedness. This condition may not always hold true either. For example, as Jiang et al. (2010, 780) explain, "the effects garnered by incidental similarity will best be realized when the opportunity for social connection is ongoing ... In the case of a brief encounter ... the effect of incidental similarity may be mitigated" (Jiang et al. 2010, 780).

From this review, it seems that both processes can contribute to the source-similarity effect as independent, rather than competing, mechanisms. The first process relates to how source similarity shapes the informational content of the advice whereas the second is more motivational and relates to how the social motive of need for connectedness is satisfied by following a similar other's advice.

However, could the source-similarity effect emerge in situations where similarity does not lead to inferences of correlated preferences or to an increased liking, or the advice context does not provide an opportunity for an ongoing connection? Prior research would suggest a negative answer to this question. However, we argue that the answer is negative because the literature has failed to recognize that processing the advice activates an important processing goal, which is easier to reach when the source is similar. This processing goal is mentalizing: advice-takers want to attribute thoughts and emotions to an interaction partner and to understand these thoughts and emotions (Frith and Frith 2006). We argue that similarity contributes positively to the advice-taking process by shaping the experience of such understanding, and the cognitive feelings produced by this experience. Such cognitive feelings are independent from the information derived from the advice, the affective response to the advice, and the social motives of the advice-taker (see Clore and Parrot 1994; Higgins 2012; Schwarz et al. 1991).

Our mentalizing-based explanation of the source-similarity effect is independent from the previously mentioned explanations. Perceptions of correlated preferences and an increased liking can both contribute to the effect when similarity leads to either of them. However, as will be seen below, our model shows that the source-similarity effect holds even when the assumptions of the previous explanations are not met. In the following, we describe our model in more detail.



## MENTALIZING, SIMILARITY, AND THE FEELING OF CERTAINTY

### Mentalizing

Mentalizing is an important cognitive skill that is developed in children from an early age, and a distinct neural network in the brain is responsible for it (Call and Tomasello 2008; Frith and Frith 2003, 2006; Premack and Woodruff 1978; Falk, Spunt and Lieberman 2012; Zaki and Ochsner 2012). Broadly, mentalizing refers to the ability to attribute mental states to other individuals, and to understand those mental states (Frith and Frith 2006).

Consider the following example: Maxi puts some chocolate in a blue box and leaves the room. While he is out, his mother moves the chocolate to a green box. Where will Maxi look when he comes back to get his chocolate? The answer is of course, the blue box, where Maxi falsely thinks the chocolate is. However, children up to the age of four may answer “the green box” because they have not yet developed the ability to understand Maxi’s mental states (Frith and Frith, 2003). This example illustrates the importance and pervasiveness of mentalizing in people’s social interactions. Interestingly, while much research in comparative psychology, developmental psychology, and neuroscience has been devoted to understanding mentalizing, research in social and consumer psychology has largely ignored its consequences for social and consumption decisions.

Mentalizing, which merely refers to an *understanding* of other people’s mental states, can be seen as a necessary precondition of related constructs in social psychology, such as sympathy, empathy, and visuospatial perspective taking. However, it should be noted that mentalizing is conceptually different from these other constructs (David et al. 2008; David et al. 2010; Schnell

et al. 2011; Yoshiy et al. 2006). Sympathy and empathy often also entail a vicarious emotional response to the perceived emotions of others or a feeling of concern about others' distress. Visuospatial perspective taking also involves visualizing oneself in the place of another individual and inferring that individual's viewpoint (Vossen, Piotrowski, and Valkenburg 2015). However, mentalizing does not necessarily entail a vicarious emotional response or a visualization of someone else's viewpoint. Moreover, some fMRI studies have shown that the higher activity in the mentalizing brain network is associated with higher scores on a personality scale like the Interpersonal Reactivity Index (Davis 1980), which measures more "cognitive" (vs. visuospatial) forms of perspective taking (Moriguchi et al. 2006).

Given that mentalizing is a fundamental ability that is required in many social interactions, one can assume that mentalizing goals are also activated within the context of processing an advice. In other words, to process an advice, an advice-taker first needs to be able to understand the adviser's mental states. The need to mentalize is a temporary goal related to processing the advice and not to a fundamental motivation of the individual. Recent evidence is consistent with this assumption. For example, in a study participants were fMRI scanned while receiving a series of communication messages. It was found that the brain network that is exclusively responsible for mentalizing shows increased activity whenever people process persuasive messages (Falk et al. 2010).

### Similarity and the Feeling of Certainty

We believe that the role of source similarity in persuasion draws from the fact that it helps create a perception of understanding the adviser's mental states. A large body of evidence

shows that similarity either directly helps people understand the mental states of their social interaction partners (Waytz, Gray, Epley, and Wegner 2010) or helps people perform social tasks that require such an understanding (Davis, Conklin, Smith, and Luce 1996; Mathur, Harada, Lipke, and Chiao 2010; Norton, Monin, Cooper, and Hogg 2003; Smith and Henry 1996).

The perception of understanding the adviser's mental states is congruent with a mentalizing goal. Therefore, similarity creates a perception that matches, or fits, the mentalizing processing goal that the advice context activates. This match results in a general feeling of certainty (i.e., a feeling of knowing) during processing of the advice. The feeling of certainty is "the feeling that one knows, understands, or comprehends" (Clore and Parrot 1994, 101; Bar-Anan, Wilson, and Gilbert 2009). This feeling is a *cognitive feeling*, which means that it is a subjective experience rather than an actual thought about being certain; however, unlike affect, it is not hedonically positive or negative (Higgins 2012; Wyer, Clore, and Isbell 1999).

People may use the feeling of certainty to validate their decision inputs, such as the advice they receive about the decision (Pham 2009; Schwarz 2012). Therefore, the feeling of certainty is used to subjectively validate the advice as a decision input. People usually express this subjective validation as "feeling right." When something feels right, it is allowed or admitted as valid, it is confirmed, or it is supported as true or just (Adaval 2001; Higgins 2012). Thus, the persuasiveness of the advice from a similar adviser is increased.

## **ISOLATING THE SOURCE-SIMILARITY EFFECT FROM OTHER SOURCE EFFECTS**

Source characteristics other than similarity are not expected to change the advice-taker's

perceptions of understanding the adviser's mental states. Therefore, our model is purely a source-similarity model and not a general model of source characteristics. This is why it is important that in our research we empirically isolate the effect of source similarity from the effect of other relevant source characteristics that may be affected by source similarity. These source characteristics include credibility, trustworthiness, and expertise (Hovland et al. 1953; Wilson and Sherrell 1993). In our studies we isolate the effect of source similarity from other source effects by showing that our similarity manipulations do not affect other source characteristics and that our predictions hold exclusively for source similarity.

## **OVERVIEW OF STUDIES**

We provide evidence for our model in four studies that together use both favorable and unfavorable advice in three different domains. We use three different operationalizations of source similarity: demographic group memberships (study 1), self-reported perceptions (study 2), and membership in groups that are randomly assigned and non-diagnostic (studies 3 and 4).

Studies 1, 2, and 3 show that the source-similarity effect is stronger among those advice-takers more likely to mentalize. Study 2, in addition, shows that the effect attenuates if an external prime induces participants to feel certain (vs. uncertain) before receiving the advice. Study 3 additionally shows (a) that advice-takers with activate (vs. not active) mentalizing goals feel more certain after receiving an advice from a similar (vs. dissimilar) adviser, and (b) that this feeling also affects judgments that are irrelevant to the advice. Study 4 shows that the effect of similarity attenuates if the feeling of certainty is misattributed to a source other than the advice.

Moreover we show that perceptions of correlated preferences, liking the adviser, and the

need for connectedness cannot account for our results. Furthermore, we test our model in the context of online reviews, which are a major source of advice for today's consumers (Nielsen 2012) but do not provide an opportunity for continued social interaction, which is assumed in a liking-based explanation of the source-similarity effect (Jiang et al. 2010).

## STUDY 1

The purpose of study 1 was to test the proposition that activation of the mentalizing goal within the advice context contributes to the source-similarity effect. Previous research has shown that people are different in how much their mentalizing goals are activated when facing tasks that encourage it. For example, Moriguchi et al. (2006) observed that scores on the perspective-taking subscale of Davis's (1980) Interpersonal Reactivity Index (IRI) are positively correlated with both activity in the mentalizing brain network and behavioral measures of mentalizing, when facing tasks that encourage mentalizing. The IRI includes four subscales called "fantasy," "empathic concern," "personal distress," and "perspective taking." The perspective-taking subscale is in fact a measure of "cognitive" (rather than visuospatial) perspective taking, and satisfactorily reflects people's tendency to mentalize.

Therefore, we use the perspective-taking subscale of the IRI to measure the likelihood that the mentalizing goal will be activated within the advice context. If an activation of the mentalizing goal contributes to the source-similarity effect, the effect should be stronger among participants who score higher on the subscale and therefore are more likely to have an activated mentalizing goal. We tested this prediction in study 1.

## Method

*Participants and design.* The study was conducted in two separate sessions, one online and one in the behavioral laboratory, with 44 students ( $M_{Age} = 23.23$ ,  $SD_{Age} = 5.36$ , 64% females) of a large US university. Participants were randomly assigned to either the similar-reviewer or the dissimilar-reviewer condition.

*Material and procedure.* At least 48 hours before the lab session, online, participants completed the perspective-taking subscale of the IRI ( $\alpha = .77$ ). Although Davis (1980) calls this subscale “perspective taking,” we will refer to participants’ scores on this subscale as “mentalizing-likelihood scores” for clarity and to avoid confusion with visuospatial perspective taking. In the lab session participants first imagined that in the course of trying to find a fun activity for the weekend, they had come across a boat-ride service, which had seemed less interesting than other possibilities. However, they had also seen a review of the service. Then participants read a review of the service. The review, which was favorable, included the reviewer’s rating (6 out of 7), a statement about the service (“The boat ride was an extraordinary experience. I had a lot of fun. I highly recommend it!”), and the reviewer’s profile. The profile manipulated similarity. The reviewer in the similar-reviewer condition was described as a student (“I am 25 years old and currently I am a student. I really like my studies and I hope to get a great job after graduating.”). The reviewer in the dissimilar-reviewer condition was described as a professor (“I am 65 years old and a professor of molecular biology at a major university. I am interested in both research and teaching.”). Then, as the persuasion measure, participants evaluated the boat-ride service using three nine-point items (“very [bad/good] choice”; “I [dislike/like] the boat-ride service very much”; and “I have a very [unfavorable/favorable]

attitude”) ( $\alpha = .85$ ).

Next, as a manipulation check, participants reported perceived reviewer similarity (“the reviewer is like me”; “the reviewer behaves like me”; and “the reviewer is similar to me”;  $\alpha = .91$ ). They also reported perceived reviewer expertise (“the reviewer has the expertise to review the boat-ride service”), credibility (“the reviewer has the credibility to review the boat-ride service”), and trustworthiness (“the reviewer is trustworthy”)—all using seven-point items ranging from “strongly disagree” to “strongly agree.”

## Results and Discussion

*Perceived similarity, expertise, credibility, and trustworthiness of the reviewer.* The reviewer in the similar-reviewer condition ( $M = 4.41$ ) was perceived to be more similar than the one in the dissimilar-reviewer condition ( $M = 2.75$ ;  $F(1, 42) = 20.34, p < .001$ ). However, the dissimilar reviewer ( $M = 4.74$ ) was perceived as more credible ( $M = 4.08$ ;  $F(1, 42) = 3.797, p = .058$ ) than the similar reviewer and as equally high in trustworthiness and expertise ( $F_s < 1$ ). Therefore, as intended, similarity was manipulated independently from the other characteristics.

*Persuasion.* After mean-centering the continuous independent variables, we ran a regression that predicted evaluations using mentalizing-likelihood, the similarity manipulation ( $-1 =$  dissimilar-reviewer condition,  $1 =$  similar-reviewer condition), and their interaction. Results did not reveal significant main effects of similarity ( $\beta = 0.123, t(40) = 0.796, p = .431$ ) or of mentalizing likelihood ( $\beta = -0.509, t(40) = -1.517, p = .137$ ). However, importantly, we observed a significant mentalizing-likelihood  $\times$  similarity interaction ( $\beta = 0.816, t(40) = 2.430, p = .020$ ). As expected, the source-similarity effect, which was present among participants with higher

mentalizing-likelihood scores ( $\beta = 0.562$ ,  $t(40) = 2.343$ ,  $p = .024$ ), attenuated among those with lower mentalizing-likelihood ( $\beta = -0.316$ ,  $t(40) = -1.342$ ,  $p = .187$ ). To our knowledge, these results are the first to show that the effect of similarity on persuasion depends on advise-takers' mentalizing goals. Previous explanations of the source-similarity effect cannot account for these findings as they do not acknowledge the role of mentalizing in the source-similarity effect.

## STUDY 2

Study 2's first purpose was to replicate study 1's findings in a different context and using a different operationalization of source similarity. Thus, the study's first prediction was similar to study 1's.

More importantly, study 2 examined the role of the feeling of certainty. Our model states that in the presence of the mentalizing goal, similarity causes a feeling of certainty that contributes to persuasion because the feeling has information value in the decision that ensues from the advice. If our model is correct, we should observe an attenuation of the source-similarity effect if we make the similarity-sourced feeling of certainty non-informative. To this end, we induced participants in this study to feel certain (vs. uncertain) through an external prime administered prior to the advice task. We predicted that the source-similarity effect would attenuate among participants who were already experiencing a high level of certainty because of the initial priming manipulation. Participants who were already experiencing high certainty would not find any additional feeling of certainty informative. Thus, the feeling of certainty caused by source similarity would not be informative for them. The source-similarity effect would hold among participants who were induced to feel uncertain because the feeling of



certainty caused by similarity would continue to have informative value for the latter group.

The third prediction is related to the fact that the feeling of certainty that causes the source-similarity effect is indeed due to the positive contribution of similarity to the mentalizing goal. Given that the effects of mentalizing and the feeling of certainty in the two earlier predictions are related to a single process, these two effects should be empirically dependent. Therefore, as our third prediction, we predicted that the effect of similarity on persuasion would emerge strongest when two conditions were *concurrently* met: (a) when mentalizing goals were more likely to be activated, and (b) when participants were primed to feel uncertain (vs. certain).

Moreover, to isolate the effect of source similarity from other source effects, we tested whether the predictions above also hold for expertise, credibility, and trustworthiness.

## Method

*Participants and design.* The study involved two phases that were at least 10 days apart. Participants were members of Amazon's Mechanical Turk website ( $N = 291$ ,  $M_{\text{Age}} = 29.94$ ,  $SD_{\text{Age}} = 9.76$ , 39% females in the main phase). The preliminary phase identified participants with high (vs. low) likelihood of activation of mentalizing goals (as measured by the IRI's perspective-taking subscale). These participants would then participate in the main phase, in which feeling of certainty (vs. uncertainty) was manipulated, but perceived similarity, expertise, credibility, and trustworthiness were measured.

*Preliminary phase.* In the preliminary phase, 799 members of Amazon's Mechanical Turk website completed the IRI's perspective-taking subscale. The scores of 196 participants fell in the first quartile ( $Q_1 = 3.29$ ). These participants, who will be called low mentalizers for

brevity, were identified as participants with low likelihood of activating the mentalizing goal. The scores of 194 participants fell in the last quartile ( $Q_3 = 4.14$ ). These participants were identified as participants with high likelihood of activating the mentalizing goal (high mentalizers). The high and low mentalizers were invited to participate in the main phase. The remaining participants were not invited.

A total of 291 of the invited participants (159 high mentalizers and 132 low mentalizers) responded to the invitation and participated in the main phase. The response rate was higher among the high mentalizers (81.95%) than among low mentalizers (67.34%,  $t(388) = 3.314$ ,  $p = .001$ ). Although unanticipated, the difference in the response rate is not surprising. High mentalizers may have been more likely to take the researchers' perspective and therefore may have been more likely to respond. Therefore, the difference in response rate seems consistent with what would be expected from the two groups, and not due to any confounds.

*Main phase: Feeling manipulation.* The main phase was conducted under the guise of two separate studies. The “first study” was used to prime feelings of certainty versus uncertainty. Under the pretense of a study on how the length of measurement scales influences people's self-report of emotions, participants repeatedly rated a particular feeling state. The particular feeling state that participants reported, and the end-points of the scales used to report it, manipulated feeling of certainty versus uncertainty. Specifically, in the uncertainty condition, participants were asked to rate “How uncertain do you feel right now?” on scales going from “somewhat uncertain” to “very uncertain.” However, in the certainty condition, participants were asked to rate “How certain do you feel right now?” on scales going from “somewhat certain” to “very certain.” Therefore, the questions in each condition were designed such that participants in the uncertainty (vs. certainty) condition would always report that they felt uncertain (vs. certain), and

by doing so they would feel more uncertain (vs. certain). To confirm the cover story, we asked participants to report the feeling state five times using scales that ranged from 5 to 19 points in length.

In a pretest, 69 Mechanical Turk participants rated how certain they felt about their environment on three nine-point items anchored at “unsure/sure,” “don’t feel confident/feel confident,” and “hesitant/determined” ( $\alpha = .91$ ) after a manipulation identical to the one described above. As expected, pretest participants in the certainty condition ( $M = 6.93$ ) reported feeling more certain than those in the uncertainty condition ( $M = 5.64$ ,  $F(1, 67) = 6.175$ ,  $p = .015$ ).

*Main phase: Advice task.* After the “first study,” participants continued to the “second study,” in which they imagined that in the course of finding a hotel for a trip, they had come across a hotel that they liked; however, they had also seen a review of it. Then all participants read a negative review of the hotel (rating of 2 out of 7: “It is relatively average compared to other hotels in the same class. The service didn’t impress me either. Overall, I was disappointed. Would I return? Probably not.”) In both conditions, the reviewer profile was identical to the one of the student in study 1. Then participants evaluated the hotel and rated the similarity, expertise, credibility, and trustworthiness of the reviewer using items similar to those in study 1. Note that because the review was negative, lower evaluations of the hotel indicated higher persuasiveness.

## Results and Discussion

*The effect of mentalizing likelihood, uncertainty, and similarity on persuasion.* After mean-centering all the continuous independent variables, we ran a regression that predicted hotel

evaluation using mentalizing likelihood, uncertainty, similarity, and all the possible interactions of these variables. We observed a main effect of similarity ( $\beta = -0.363$ ,  $t(283) = -7.038$ ,  $p < .001$ ), which was qualified by three interactions that were of substantive importance to our theory. First, we observed a similarity  $\times$  mentalizing-likelihood interaction ( $\beta = -.158$ ,  $t(283) = -3.052$ ,  $p = .002$ ). As expected from the first prediction of this study, the effect of similarity on persuasion was stronger among high mentalizers ( $\beta = -0.521$ ,  $t(283) = -7.806$ ,  $p < .001$ ) than among low mentalizers ( $\beta = -0.206$ ,  $t(283) = -2.612$ ,  $p = .009$ ). These results replicate study 1's findings and support the notion that the activation of the mentalizing goal in the advice context contributes to the source-similarity effect.

Second, we observed a similarity  $\times$  uncertainty interaction ( $\beta = -0.103$ ,  $t(283) = -2.001$ ,  $p = .046$ ). As expected from the study's second prediction, the effect of similarity was smaller among participants who had a priori been induced to feel certain ( $\beta = -0.260$ ,  $t(283) = -3.588$ ,  $p < .001$ ) than among those who had a priori been induced to feel uncertain ( $\beta = -0.467$ ,  $t(283) = -6.347$ ,  $p < .001$ ). This effect is because the similarity-sourced feeling of certainty has less informative value for participants who are primed to feel certain (vs. uncertain) before receiving the advice. In a manner which is consistent with a "moderation-of-process" paradigm (Spencer, Zanna, and Fong 2005), these results show that the process by which source similarity affects persuasion is through creation of a feeling of certainty.

Finally, consistent with the third prediction, we found a significant similarity  $\times$  mentalizing-likelihood  $\times$  uncertainty interaction ( $\beta = -0.107$ ,  $t(283) = -2.078$ ,  $p = .039$ ) such that the interaction between similarity and mentalizing likelihood was smaller among participants who were a priori induced to feel certain ( $t(283) = -0.694$ ,  $p = .489$ ) than among participants who were a priori induced to feel uncertain ( $\beta = -0.265$ ,  $t(283) = -3.602$ ,  $p < .001$ ). In other words, as

predicted, the effect of similarity on persuasion was strongest when participants *concurrently* had higher mentalizing likelihood and were primed to feel uncertain (see figure 2). (The other predictors were not significant:  $p$ -values  $> .164$ .) This result supports the notion that the roles of the feeling of certainty and mentalizing in the source-similarity effect are not independent, but are related to a common process.

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*Do the findings extend to other source characteristics?* To test whether the above findings also extend to the effects of expertise, credibility, and trustworthiness on persuasion, we ran three additional regressions (regressions 1, 2, and 3). Regression 1 examined the effect of expertise. Regression 2 examined the effect of credibility. Regression 3 examined the effect of trustworthiness. Each regression predicted hotel evaluation with mentalizing likelihood, uncertainty, the specific characteristic that the regression was meant to examine, along with all the possible interactions of mentalizing likelihood, uncertainty, and that specific characteristic. In each regression, the only significant term was the main effect of the source characteristic being examined in that model: expertise in regression 1 ( $\beta = -0.158$ ,  $t(283) = -2.530$ ,  $p = .012$ ), credibility in regression 2 ( $\beta = -0.203$ ,  $t(283) = -3.337$ ,  $p = .001$ ), and trustworthiness in regression 3 ( $\beta = -0.353$ ,  $t(283) = -5.091$ ,  $p < .001$ ). All other terms in these three regressions were non-significant (all  $p$ -values  $> .148$ ). Therefore, as expected, the predictions made for source similarity hold exclusively for similarity and do not extend to other source characteristics, which are not expected to change the advice-taker's perceptions of understanding the adviser's mental states.

### STUDY 3

The first purpose of study 3 was to conceptually replicate the general findings of the previous studies by operationalizing mentalizing goals using a prime, rather than using the IRI as a proxy for the likelihood of activating the goal. We predicted that the source-similarity effect would emerge when participants were primed to engage in mentalizing and that the effect would attenuate when participants were primed to avoid mentalizing.

Furthermore, we measured participants' feeling of certainty after receiving an advice. Similarity creates a feeling of certainty by contributing to a mentalizing goal that is activated within the advice context. Thus, we predicted that participants would report feeling more certain after receiving the advice from the similar (vs. dissimilar) adviser if they had an activated mentalizing goal as a result of the engage-in-mentalizing prime. However, similarity would not have a positive effect on the feeling of certainty among participants in the avoid-mentalizing condition, whose mentalizing goals were interrupted. Moreover, to show that the feeling of certainty contributes to persuasion, we predicted that it would mediate the effect of similarity on persuasion among participants who had been primed to engage in mentalizing.

Based on our conceptualization, the certainty caused by similarity to the adviser is a *subjective* experience. Therefore, once experienced, this feeling of certainty may be attributed to any decision at hand, which may or may not include the advice (Clore and Parrot 1994). To test whether our conceptualization regarding the subjective nature of this certainty is correct, we predicted that the feeling of certainty caused by processing the advice would influence participants' judgments even in a context that is unrelated to the advice. Specifically, parallel to the predictions made regarding the feeling of certainty, we predicted that participants who had

been primed to engage in mentalizing (vs. to avoid mentalizing) would report a better understanding of a poem that they read after receiving the advice from the similar (vs. dissimilar) adviser.

To further dissociate our explanation of the source-similarity effect from prior explanations, in this (and the next) study we operationalized similarity (vs. dissimilarity) on the basis of whether the adviser was in the same random, non-diagnostic group as the participant's group. Compared to the ones in the previous studies, this operationalization is even less likely to result in inferences of correlated preferences. Furthermore, we measured liking and perceptions of correlated preferences to ensure that they were not affected by our manipulation.

## Method

*Participants and design.* A total of 205 participants from Amazon's Mechanical Turk website ( $M_{\text{Age}} = 37.5$ ,  $SD_{\text{Age}} = 12.13$ , 58.5% females) were randomly assigned to one of the conditions of a 2 (prime: engage in vs. avoid mentalizing)  $\times$  2 (similarity: similar vs. dissimilar) between-subjects experiment. (The higher number of participants per condition in studies 3 and 4 was because we expected the subtle manipulation of similarity in these studies to yield a smaller effect size. Therefore, we expected to need a larger sample size to achieve the required power.)

*General procedure overview.* The session consisted of three ostensibly unrelated surveys that in fact each served a separate function in our study. One of these surveys was a "product evaluation survey," which served as the main advice task that provided some information and a piece of advice about a fictitious DSLR camera, manipulated similarity, and measured persuasion. This survey, which lasted throughout the session, was interrupted twice: once with a

“social information survey,” which primed mentalizing goals (engage in vs. avoid mentalizing) and once with a “literature survey,” which measured feeling of certainty.

*Material.* The session started with the “product evaluation survey” in which participants were randomly assigned a group name (group C or E) and asked to remember it “for bookkeeping purposes.” Then they imagined planning to buy a DSLR camera and read some information about a fictitiously branded camera (see appendix). At this point, to supposedly simulate the time gap that usually exists between receiving different types of information about products in the real world, the “product evaluation survey” was interrupted, and participants started the “social information survey,” knowing that they would return to the “product evaluation survey” later.

In the “social information survey” participants saw a series of 15 cartoons that each depicted a person doing a certain household chore (e.g., dusting, sweeping, washing dishes, etc.) and described each cartoon as fast as they could using about 15 words in a maximum of 20 seconds. The manner in which participants described the cartoons primed different mentalizing goals. In the engage-in-mentalizing condition, participants were instructed to focus on understanding and describing the thoughts and emotions, rather than the physical actions, of the person doing the chores. In contrast, in the avoid-mentalizing condition participants were instructed to focus on the reverse.

Then participants returned to the “product evaluation survey,” in which they read what was supposedly the opinion (see appendix) that another participant in the same study had previously expressed about the camera. Participants were told that they would also be asked to express their own opinion later. To manipulate similarity, we informed participants of the alleged



group name of the “other participant,” and asked participants to indicate whether their group was similar or dissimilar to the random group of the “other participant.”

At this point, once again the “product evaluation survey” was interrupted by a “literature survey,” in which participants first read eight lines from a poem (stimuli adapted from Clore and Parrot 1994). Then as a measure of the perceptions of understanding the poem, participants indicated how well they could explain the meaning of the poem on a scale ranging from 1 = “very well” to 9 = “not well at all” (reverse coded). Following this, as a measure of the feeling of certainty, participants also reported how certain or uncertain they felt at that moment on a scale ranging from 1 = “very certain” to 7 = “very uncertain” (reverse coded).

Finally, participants returned to the last part of the “product evaluation survey,” where they indicated their willingness to pay (WTP) for the camera. Participants also reported the expertise, credibility, trustworthiness, and similarity of the adviser using items similar to those of previous studies. As a measure of perceptions of correlated preferences, using scales ranging from 1 = “strongly disagree” to 7 = “strongly agree” ( $r = .86$ ), they reported to what extent they agreed that “The participant shares my taste and opinions regarding the camera” and that “I share the participant’s taste and opinions regarding the camera.” Additionally, as a measure of liking, using similar items, they reported whether “The participant is likable” and whether “I like the participant” ( $r = .88$ ).

## Results and Discussion

*Perceptions of similarity, expertise, credibility, and trustworthiness.* An ANOVA on the similarity perceptions, with the similarity and priming manipulations as independent factors,

showed that perceived similarity with the reviewer was higher if the reviewer was in the similar-reviewer condition ( $M = 4.43$ ) than if the reviewer was in the dissimilar-reviewer condition ( $M = 4.10$ ;  $F(1, 201) = 5.08, p = .025$ ) (other  $p$ -values  $> .19$ ). However, similar ANOVAs on perceptions of expertise, credibility, and trustworthiness revealed no effects at all (all  $F$ s  $< 1$ ). Therefore, our similarity manipulation affected similarity perceptions without influencing perceptions of expertise, credibility, or trustworthiness.

*Likability and perceptions of correlated preferences.* Two similar ANOVAs on liking and on the perceptions of correlated preferences showed no effects (all  $F$ s  $< 1$ ). Therefore participants did not assume a higher degree of correlated preferences between themselves and the similar (vs. dissimilar) reviewer. They also did not like the similar reviewer more than they liked the dissimilar reviewer. These results show that prior explanations of the source-similarity effect cannot explain our findings.

*Willingness to pay for the camera.* The WTP responses were not normally distributed. Therefore, we ran an ANOVA on the log-transformed WTPs with the prime and similarity conditions as the independent factors. Results did not reveal an effect of the prime ( $F < 1$ ) or of similarity ( $F(1, 201) = 1.834, p = .495$ ). Importantly however, we observed a significant prime  $\times$  similarity interaction ( $F(1, 201) = 4.570, p = .034$ ). As expected, the source-similarity effect was present among participants who were primed to mentalize ( $M_{\text{Similar}} = \$401.3$ ;  $M_{\text{Dissimilar}} = \$322.5$ ;  $F(1, 201) = 6.159, p = .014$ ). However, the effect was absent among participants who were primed to avoid mentalizing ( $M_{\text{Similar}} = \$326.4$ ,  $M_{\text{Dissimilar}} = \$369.5$ ;  $F < 1$ ). (See figure 3.) Along with similar results in the prior studies, these results support the notion that activation of mentalizing goals in the advice context contributes to the source-similarity effect.

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Insert figure 3 about here.

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*Feeling of certainty.* A similar ANOVA on the measure of self-reported certainty showed only a significant prime  $\times$  similarity interaction ( $F(1, 201) = 9.993, p = .002$ ) (other  $F$ s  $< 1$ ). As expected, among participants who were primed to mentalize, feeling of certainty was higher if the reviewer was similar ( $M = 4.27$ ) than if the reviewer was dissimilar ( $M = 3.62; F(1, 201) = 4.3626, p = .038$ ). In contrast, the effect was reversed among participants who were primed to avoid mentalizing ( $M_{\text{Similar}} = 3.75; M_{\text{Dissimilar}} = 4.50; F(1, 201) = 5.664, p = .018$ ). Therefore, similarity (vs. dissimilarity) leads to feeling more certain when advice takers are primed to engage in (vs. avoid) mentalizing.

*Mediating role of the feeling of certainty.* Following Muller, Judd, and Yzerbyt (2005), we also ran a regression analysis with the log-transformed WTP as the dependent variable and similarity, prime, feeling of certainty (mean-centered), and all their two-way interactions as independent variables. The regression revealed a main effect of the feeling of certainty ( $\beta = 0.035, t(198) = 2.062, p = .040$ ) and an attenuation of the prime  $\times$  similarity interaction ( $\beta = 0.044, t(198) = 1.640, p = .103$ ). These results, combined with the prime  $\times$  similarity interaction observed earlier, show that the feeling of certainty mediates the effect of similarity on persuasion among participants who were primed to mentalize. These results show that what contributes to persuasion is indeed the feeling of certainty that is created by source similarity in the presence of the mentalizing goal.

*Perception of understanding an unrelated poem.* An ANOVA on perceptions of understanding the poem, with prime and similarity as independent factors, showed only a significant prime  $\times$  similarity interaction ( $F(1, 201) = 7.090, p = .008$ ) (other  $p$ -values  $> .114$ ). As expected, participants who were primed to mentalize perceived that they understood the

unrelated poem better if the reviewer was similar ( $M = 5.54$ ) than if the reviewer was dissimilar ( $M = 4.59$ ;  $F(1,201) = 4.660, p = .032$ ). In contrast, similarity did not affect the perceptions of understanding the poem among participants who were primed to avoid mentalizing ( $M_{Similar} = 5.20$ ;  $M_{Dissimilar} = 5.92$ ;  $F(1,201) = 2.592, p = .110$ ). Therefore the feeling of certainty, which is created by source similarity, influences a completely unrelated decision about a poem. This finding is consistent with the notion that the certainty created by source similarity is not a specific thought about the adviser or about the advice itself. Rather, it is a subjective experience.

#### STUDY 4

The first purpose of this study was to provide an additional test for the notion that the certainty that contributes to the source-similarity effect is indeed a *feeling* of certainty. Previous research has shown that people use their feelings in their decisions only if they believe that those feelings have information value (see Greifeneder, Bless, and Pham 2011 and Schwarz 2012 for reviews). Therefore, if people misattribute the real source of an integral feeling to an external source, they will ignore that integral feeling when making a decision (e.g., Pham 1998). If a *feeling* of certainty increases a similar adviser's persuasiveness, the effect of similarity on persuasion should attenuate among participants who misattribute the feeling of certainty to an external, irrelevant source. However, if the certainty that contributes to the source-similarity effect is not a feeling (e.g., if it is the activation of the concept of certainty, etc.), a misattribution manipulation (which involves suggesting to participants that they are feeling certain) either should have no effect, or should strengthen the source-similarity effect. Therefore the first prediction of this study was that the effect of similarity on persuasion would attenuate if

participants were led (vs. not led) to believe that they are feeling certain because of a source other than the advice.

Furthermore, in this study we provided support for two details in our model that were not touched upon in the prior studies. One of these details is that similarity in fact creates a *perception of understanding* the adviser's mental states—a perception that, we argue, creates a feeling of certainty because it matches with the mentalizing goal. Therefore, we predicted that participants' perceptions of how much they understood the adviser's mental states would be higher if the adviser was similar (vs. dissimilar). The second detail is that the feeling of certainty that causes the source-similarity effect is attributed to the advice as a decision input, such that the advice is subjectively validated, or feels right. Therefore, we predicted that the advice would subjectively feel more valid (i.e., feel more right), if the adviser was similar (vs. dissimilar).

In this study, we aimed to provide additional evidence that the motivation to maintain connectedness with a liked adviser did not contribute to our findings. To provide support for the connectedness-based explanation, prior research has used Lee and Robbins's (1995) Social Connectedness Scale to show that the effect of source similarity is stronger if people have a stronger need for connectedness (Jiang et al. 2010). Here we measured participants' need for connectedness using the same scale. However, because our study's context does not provide an opportunity for continued social interaction, and therefore does not satisfy the assumptions of the connectedness-based explanation, we predicted that the need for connectedness would not affect the source-similarity effect in our study.

## Method

*Participants and design.* A total of 487 participants from Amazon's Mechanical Turk website ( $M_{\text{Age}} = 35.98$ ,  $SD_{\text{Age}} = 12.83$ , 58% females) were randomly assigned to one of the conditions of a  $2$  (attribution: control vs. misattribution)  $\times 2$  (similarity: similar vs. dissimilar) between-subjects experiment.

*Material and procedure.* The procedure was very similar to the one of study 3's "product evaluation survey." We assigned participants a group name, asked them to remember it throughout the session, asked them to imagine planning to buy a camera, provided them with some information about it, showed them a positive review by "another participant," and manipulated similarity with the "other participant." The stimuli used here were identical to those of study 3, with one exception: because of our misattribution manipulation, the text of the review employed a font theme different from the one used in the rest of the survey.

After reading the review, as a measure of participants' perception of how well they understood the adviser's mental states, participants indicated how much they agreed that "I feel I understand how the other participant thinks," using an item ranging from 1 = "strongly disagree" to 7 = "strongly agree." We also measured the subjective validation of the advice by asking participants to report how much they agreed that "The other participant's opinion feels right to me," and "The other participant's opinion feels wrong to me" (reverse coded) ( $r = .67$ ) using items identical to the latter.

Then, we introduced the misattribution manipulation. Participants in the misattribution condition were told that the review had been written using a special font theme, which creates a feeling of certainty in the person exposed to it. They were also told that we needed to know how beautiful this theme was. In contrast, participants in the control condition were only told that a special font theme had been used for writing the review and that we needed to know how

beautiful the theme was. Then all participants answered one item about the beauty of the font. Therefore, although both groups assumed that the information about the font of the review was given to seek their opinion about its beauty, participants in the misattribution condition were also made to think that they were feeling certain because of it.

Finally, participants indicated their WTP for the camera, and reported perceptions of correlated preferences, expertise, credibility, trustworthiness, similarity, and likability of the adviser using items similar to those used in the previous study. Participants also completed the Social Connectedness Scale ( $\alpha = .97$ ).

## Results and Discussion

*Perceptions of similarity, expertise, credibility, and trustworthiness.* An ANOVA on the similarity perceptions, with the similarity and misattribution manipulations as independent factors, showed that the reviewer was perceived as more similar if described to be in the same ( $M = 4.41$ ) random group than if described to be in a different group ( $M = 4.06$ ;  $F(1, 483) = 11.030$ ,  $p = .001$ ) (other  $F$ s  $< 1$ ). However, similar ANOVAs showed that the similarity manipulation did not affect perceptions of expertise, credibility, or trustworthiness (all  $p$ -values  $> .274$ ).

*Likability and perceptions of correlated preferences.* Two other similar ANOVA analyses showed that the similarity manipulation did not affect perceptions of correlated preferences or liking of the adviser (all  $p$ -values  $> .150$ ). Therefore, prior explanations of the source-similarity effect cannot explain our findings.

*Perceptions of understanding the adviser's mental states.* Another similar ANOVA analysis showed that when the adviser was similar, participants perceived that they understood

better what the adviser thought ( $M_{Similar} = 5.13$ ;  $M_{Dissimilar} = 4.84$ ;  $F(1,483) = 4.674$ ,  $p = .031$ ) (other  $p$ -values  $> .171$ ). Therefore, consistent with our model, similarity creates a perception of understanding an adviser's mental states.

*Willingness to pay for the camera.* An ANOVA on the log-transformed WTPs with the similarity and misattribution manipulations as the independent factors showed only a significant misattribution  $\times$  similarity interaction ( $F(1,483) = 7.628$ ,  $p = .006$ ) (other  $p$ -values  $> .122$ ). As expected, the source-similarity effect was present among participants in the control condition ( $M_{Similar} = \$413.7$ ,  $M_{Dissimilar} = \$324.8$ ;  $F(1,483) = 6.159$ ,  $p = .010$ ) but disappeared among participants who misattributed the feeling of certainty to the font of the advice ( $M_{Similar} = \$312.3$ ,  $M_{Dissimilar} = \$350.3$ ;  $F(1,483) = 1.761$ ,  $p = .185$ ) (see figure 4). Therefore, if advice-takers misattribute the source of the feeling of certainty to a source other than the advice, the effect of source similarity on persuasion is eliminated. Note that the misattribution manipulation here involved suggesting to participants that they were feeling certain. If concept activation or a thought about being certain were the cause of the source-similarity effect, this suggestion should have further strengthened the source-similarity effect. However, consistent with predictions of the feelings-as-information theory, the misattribution manipulation attenuated the effect (see Greifeneder et al. 2011 and Schwarz 2012).

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Insert figure 4 about here.

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*Subjective validation of the advice.* A similar ANOVA analysis also revealed that, as predicted, participants considered the advice subjectively more valid if the adviser was similar ( $M = 5.26$ ) than if the adviser was dissimilar ( $M = 4.95$ ;  $F(1,483) = 11.659$ ,  $p = .002$ ) (other  $F$ s  $< 1$ ). Following Muller et al. (2005), we also found evidence that that subjective validation



partially mediates the effect of the misattribution  $\times$  similarity interaction on WTP. (The mediation results are available in the web appendix.) This result is consistent with the notion that the feeling of certainty, which is induced by source similarity, subjectively validates the advice as a decision input.

*Need for social connectedness.* To investigate whether the need for social connectedness can account for our results, we ran a regression with log-transformed WTP as dependent variable and similarity, misattribution, social connectedness (SC; mean-centered), and all their possible interactions as independent variables. The similarity  $\times$  SC interaction was not significant ( $t(479) = .974, p = .331$ ). Therefore, we did not find any support for the role of social connectedness in the source-similarity effect. In fact, the only significant effect that emerged from this regression was the previously observed misattribution  $\times$  similarity interaction ( $\beta = .040, t(479) = 2.608, p = .009$ ) (other  $p$ -values  $> .108$ ). The fact that the need for social connectedness cannot account for our findings is not surprising because the context of our study does not provide an opportunity for continued social interaction, which is a prerequisite for a connectedness-based explanation.

## GENERAL DISCUSSION

In this article, we presented a novel explanation for an important and classic effect in the persuasion literature: the persuasiveness of similar others. In summary, our explanation states that the context of processing an advice activates the goal to mentalize. Similarity creates a perception of understanding the adviser's mental states, which is congruent with the mentalizing goal and creates a general feeling of certainty. The feeling of certainty subjectively validates the advice as a decision input. Thus, similar advisers are more persuasive.

In support of our propositions, we found that the effect of similarity on persuasion attenuates when advice-takers are less likely to mentalize (studies 1, 2, and 3). This finding shows that the need to mentalize is necessary for the source-similarity effect to emerge. Moreover, advice-takers reported feeling more certain after receiving an advice from a similar (vs. dissimilar) adviser when the mentalizing goal was activated (vs. interrupted) (study 3). This finding shows that similarity leads to a feeling of certainty because of the mentalizing goal.

Moreover, we observed that source similarity, even when operationalized through random and non-diagnostic group memberships, creates a perception of understanding the adviser's mental states (study 4). We reasoned that such a perception is congruent with the mentalizing goal and this congruence causes the feeling of certainty. We also found that the effect of similarity on persuasion attenuates if advice-takers are externally induced to feel certain (vs. uncertain) prior to receiving the advice (study 2) or if advice-takers misattribute the feeling to an irrelevant source (study 4). These findings show that the feeling of certainty contributes to the source-similarity effect. Moreover, we found that the feeling of certainty produced by source similarity affects judgments that are completely unrelated to the advice (study 3). Finally, we also found that advice-takers consider an advice from a similar adviser as more subjectively valid (study 4). This finding is consistent with the notion that the feeling of certainty causes greater persuasiveness by subjectively validating the advice as a decision input.

Although our model does not invalidate other explanations of the source-similarity effect, inferences of correlated preferences or an increased liking cannot be plausible alternative accounts for our findings within the context of our studies. First, although prior explanations would account for a *main effect* of source similarity in our studies, none would account for the interactions observed. Second, in our studies, the similarity manipulation did not lead to

inferences of correlated preferences or to an increased liking, and the need for connectedness did not play a role in our findings.

Viewed from a broad perspective, rather than focusing on how similarity shapes the advice-taker's thought content (e.g., "this advice is informative"), or focusing on how similarity contributes to satisfying the advice-taker's social motives (e.g., social connectedness), our model focuses on how similarity contributes to the cognitive feelings produced by the experience of processing the advice. By taking this approach, we provide some insights that prior explanations would not be able to provide. One insight is, of course, that the effect of similarity on persuasion goes beyond the situations that satisfy the assumptions of prior explanations. Interestingly, our research seems timely, because the assumptions of prior explanations are less likely to hold in one of the most common advice situations of our age—that is, online reviews. A second important insight is that source similarity may have effects that in fact go beyond the persuasion attempt itself. In other words, similarity creates a feeling of certainty that, by the virtue of being a subjective experience, has the potential to influence decisions that are completely unrelated to the phenomenon that created it. Therefore, the effects of the feeling of certainty that source similarity creates may involve decisions that are unrelated to the advice. For example, imagine that a consumer stops at a bookstore upon returning from an advice session with a therapist. Although preliminary, the evidence from our research (study 3) suggests that at least as long as the ease of understanding the book is important for the consumer, the degree of similarity to the therapist may have an effect on the consumer's purchase decisions in the book store.

### Data Collection Information

The first author collected and analyzed all the data reported in this paper during the period of Summer 2013 to Fall 2014. Study 1 was conducted at Columbia University (USA). Studies 2, 3, and 4 were conducted on Mturk.

## Appendix

Information provided about the camera in studies 3 and 4:

The ABL DSLR Camera
<p>The <b>ABL DSLR Camera with EF-S 18-55mm f/3.5-5.6 IS STM Lens</b> from <b>ABL</b> is an APS-C format digital SLR camera with an 18MP CMOS sensor and the DIGIC 5 image processor. It is combined with the EF-S 18-55mm f/3.5-5.6 IS STM lens for an effective range of wide-angle to standard focal length.</p> <p>With 14-bit Analog/Digital conversion, an ISO range from 100-12800 (expandable to 25600) and Multi Shot Noise Reduction, the ABL offers sharp details, accurate colors and low-noise imaging in both bright and low-light shooting situations. Its 9-point all cross-type autofocus system provides fast focusing when shooting with the viewfinder, and Hybrid CMOS AF increases autofocus speeds when shooting in Live View. The ABL can continuously shoot up to 5 fps.</p> <p>A 3.0" Touchscreen LCD with 1,040k-dot resolution provides composition and playback viewing. Its tilt and swivel capability makes it easy to compose your shots at odd angles, and a smudge-resistant coating keeps the monitor clear. Intuitive touchscreen operation includes Touch Autofocus.</p> <p>Full HD 1080p at 30 fps and 24 fps is supported for continuous autofocus during shooting. Manual exposure is provided in video mode and 60 fps is possible when shooting at 720p HD. A built-in stereo microphone with manual audio level adjustment is provided for quality audio recording with your videos.</p>

The review of the camera by the “other participant” in studies 3 and 4:

*"I studied the features of this camera carefully. ABL seems to be a new brand but the features on the camera are top-notch. It is a really good camera both for beginners and professionals. The touchscreen LCD and continuous autofocus are brilliant features. If I had to buy a DSLR camera today I would definitely be willing to pay a high price for this camera. I would also recommend it to anyone who wants to buy a DSLR camera."*

## REFERENCES

- Adaval, Rashmi (2001), "Sometimes it Just Feels Right: The Differential Weighting of Affect-Consistent and Affect-Inconsistent Product Information," *Journal of Consumer Research*, 28, 1–17.
- Bar-Anan, Yoav, Timothy D. Wilson, and Daniel T. Gilbert (2009), "The Feeling of Uncertainty Intensifies Affective Reactions," *Emotion*, 9(1), 123–27.
- Baumeister, Roy F., and Mark R. Leary (1995), "The need to belong: Desire for interpersonal attachments as a fundamental human motivation," *Psychological Bulletin*, 117 (3), 497–529.
- Berscheid, Ellen. (1966), "Opinion change and communicator-communicatee similarity and dissimilarity," *Journal of Personality and Social Psychology*, 4(6), 670–80.
- Brock, Timothy C. (1965), "Communicator-recipient similarity and decision change," *Journal of Personality and Social Psychology*, 1(6), 650–54.
- Byrne, Donn (1961), "Interpersonal attraction as a function of affiliation need and attitude similarity," *Human Relations*, 14, 283–289.
- \_\_\_\_\_. (1969), "Attitudes and attraction," in *Advances in Experimental Social Psychology*, Leonard Berkowitz (Ed.), Elsevier, 35–89.
- Byrne, Donn, Gerald Clore, and Philip Worchel (1966), "Effect of economic similarity-dissimilarity on interpersonal attraction," *Journal of Personality and Social Psychology*, 4 (2), 220–224.
- Call, Josep and Michael Tomasello (2008), "Does the chimpanzee have a theory of mind? 30 years later," *Trends in Cognitive Sciences*, 12 (5), 187–192.

- Churchill, Gilbert A., Robert H. Collins, and William A. Strang (1975), "Should retail salespersons be similar to their customers?" *Journal of Retailing*, 51 (3), 29–42.
- Clore, Gerald L. and W. Gerrod Parrott (1994), "Cognitive feelings and metacognitive judgments," *European Journal of Social Psychology*, 24, 101–15.
- David, Nicole, Carolin Aumann, Natacha S. Santos, Bettina H. Bewernick, Simon B. Eickhoff, Albert Newen, N. Jon Shah, Gereon R. Fink, and Kai Vogeley (2008) "Differential involvement of the posterior temporal cortex in mentalizing but not perspective taking," *SCAN*, 3, 279–289.
- David, Nicole, Carolin Aumann, Bettina H. Bewernick, Natacha S. Santos, Fritz-G. Lehnhardt, Kai Vogeley (2010) "Investigation of Mentalizing and Visuospatial Perspective Taking for Self and Other in Asperger Syndrome," *Journal of Autism and Developmental Disorders*, 40, 290–299.
- Davis, Mark H. (1980), "A multidimensional approach to individual differences in empathy," *JSAS Catalog of Selected Documents in Psychology*, 1980, 10, 85.
- Davis, Mark H., Laura Conklin, Amy Smith, and Carol Luce (1996), "Effect of Perspective Taking on the Cognitive Representation of Persons: A Merging of Self and Other," *Journal of Personality and Social Psychology*, 70(4), 713–26.
- Dryer, D. Christopher and Leonard M. Horowitz (1997), "When do opposites attract? Interpersonal complementarity versus similarity," *Journal of Personality and Social Psychology*, 72 (3), 592–603.
- Evans, F. B. (1963), "Selling as a dyadic relationship: A new approach," *American Behavioral Scientist*, 6(May), 76–79.

- Falk, Emily B., Lian Rameson, Elliot T. Berkman, Betty Liao, Yoona Kang, Tristen K. Inagaki, and Matthew D. Lieberman (2010), "The Neural Correlates of Persuasion: A Common Network across cultures and media," *Journal of Cognitive Neuroscience*, 22(11), 2447–59.
- Falk, Emily B., Robert P. Spunt, and Matthew D. Lieberman (2012), "Ascribing beliefs to ingroup and outgroup political candidates: Neural correlates of perspective-taking, issue importance and days until the election," *Philosophical Transactions of The Royal Society of London B*, 367, 731–43.
- Frith, Uta and Christopher D. Frith (2003), "Development and neurophysiology of mentalizing," *Philosophical Transactions of the Royal Society of London*, 358, 459–73.
- Frith, Christopher D. and Uta Frith (2006), "The Neural Basis of Mentalizing," *Neuron*, 50, 531–34.
- Gadel, M. S. (1964), "Concentration by salesmen on congenial prospects," *Journal of Marketing*, 28 (2) 64–66.
- Gino, Francesca, Jen Shang, and Rachel Croson (2009), "The impact of information from similar or different advisors on judgment," *Organizational Behavior and Human Decision Processes*, 108, 287–302.
- Goethals, George R. and R. Eric Nelson, (1973), "Similarity in the influence process: The belief-value distinction," *Journal of Personality and Social Psychology*, 25, 117–122.
- Greifeneder, Reiner, Herbert Bless, and Michel Tuan Pham (2011), "When Do People Rely on Affective and Cognitive Feelings in Judgment? A Review," *Personality and Social Psychology Review*, 15(2), 107–41.



- Higgins, E. Tory (2012), *Beyond Pleasure and Pain: How motivation works*, Oxford University Press.
- Hovland, Carl I., Irving L. Janis, and Harold H. Kelley (1953), *Communications and persuasion: Psychological studies in opinion change*. New Haven, CT: Yale University Press.
- Jiang, Lan, Joandrea Hoegg, Darren W. Dahl, and Amitava Chattopadhyay (2010), “The Persuasive Role of Incidental Similarity on Attitudes and Purchase Intentions in a Sales Context,” *Journal of Consumer Research*, 36(February), 778–91.
- Lee, Richard M. and Steven B. Robbins (1995), “Measuring Belongingness: The Social Connectedness and the Social Assurance Scales,” *Journal of Counseling Psychology*, 42 (April), 232–41.
- Markey, Patrick, Sara Lowmaster, and Wendy Eichler (2010), “A real-time assessment of interpersonal complementarity,” *Personal Relationships*, 13–25.
- Markey, Patrick M. and Charlotte N. Markey. (2007), “Romantic ideals, romantic obtainment and relationship experiences: The complementarity of interpersonal traits among romantic partners,” *Journal of Social and Personal Relationships*, 24 (4), 517–533.
- Mathur, Vani A., Tokiko Harada, Trixie Lipke, and Joan Y. Chiao (2010), “Neural basis of extraordinary empathy and altruistic motivation,” *NeuroImage*, 51, 1468–1475.
- Moriguchi Yoshiy, Takashi Ohnishi, Richard D. Lane, Motonari Maeda, Takeyuki Mori, Kiyotaka Nemoto, Hiroshi Matsuda, and Gen Komakia (2006), “Impaired self-awareness and theory of mind: An fMRI study of mentalizing in alexithymia,” *NeuroImage*, 32, 1472–1482.

- Muller, Dominique, Charles M. Judd, and Vincent Y. Yzerbyt (2005), "When Moderation Is Mediated and Mediation Is Moderated," *Journal of Personality and Social Psychology*, 89(6), 852–63.
- Nielsen (2012) <http://www.nielsen.com/us/en/press-room/2012/nielsen-global-consumers-trust-in-earned-advertising-grows.html>.
- Norton, Michael I., Benoit Monin, Joel Cooper, and Michael A. Hogg (2003), "Vicarious dissonance: Attitude change from the inconsistency of others," *Journal of Personality and Social Psychology*, 85(1), 47–62.
- Nowicki Jr., Stephen and Susan Manheim (1991), "Interpersonal complementarity and time of interaction in female relationships," *Journal of Research in Personality*, 25 (3), 322–333.
- Pham, Michel T. (1998), "Representativeness, relevance, and the use of feelings in decision making," *Journal of Consumer Research*, 25(2), 144–59.
- \_\_\_\_\_ (2009), "The Lexicon and Grammar of Affect-as-Information in Consumer Decision Making: The GAIM," in *Social Psychology of Consumer Behavior*, Michaela Wänke (Ed.), Psychology Press, 167–200.
- Premack, David and Guy Woodruff (1978), "Does the chimpanzee have a theory of mind?" *Behavioral and Brain Sciences*, 1 (4), 515–526.
- Schwarz, Norbert. (2012). Feelings-as-information theory. In P. Van Lange, A. Kruglanski, and E. T. Higgins (eds.) (2012), *Handbook of theories of social psychology* (pp. 289–308). Sage.
- Schwarz, Norbert, Herbert Bless, Fritz Strack, Gisela Klumpp, Helga Rittenauer-Schatka, and Anette Simons (1991), "Ease of retrieval as information: Another look at the availability heuristic," *Journal of Personality and Social Psychology*, 61(2), 195–202.

- Schwarz, Norbert and Gerald L. Clore (1983), "Mood, misattribution, and judgment of well-being: Informative and directive functions of affective states," *Journal of Personality and Social Psychology*, 45(3), 513–23.
- Simon, Herbert W., Nancy Berkowitz, and John Moyer (1970), "Similarity, credibility, and attitude change: A review and a theory," *Psychological Bulletin*, 73 (January), 1–16.
- Schnell, Knut, Sarah Bluschke, Brigitte Konradt, Henrik Walter (2011) "Functional relations of empathy and mentalizing: An fMRI study on the neural basis of cognitive empathy," *NeuroImage*, 54, 1743–1754.
- Smith, Eliot R. and Susan Henry (1996), "An In-group Becomes Part of the Self: Response Time Evidence," *Personality and Social Psychology Bulletin*, 22(6), 635.
- Sunnafrank, Michael (1983). Attitude similarity and interpersonal attraction in communication processes: In pursuit of an ephemeral influence. *Communication Monographs*, 50, 273–284.
- Sunnafrank, Michael, and Gerald R. Miller (1981). The role of initial conversations in determining attraction to similar and dissimilar strangers, *Human Communication Research*, 8, 16–25.
- Vossen, Helen G.M., Jessica T. Piotrowski, and Patti M. Valkenburg (2015) "Development of the Adolescent Measure of Empathy and Sympathy," *Personality and Individual Differences*, 74, 66–71.
- Waytz, Adam, Kurt Gray, Nicholas Epley, and Daniel M. Wegner (2010), "Causes and consequences of mind perception," *Trends in Cognitive Sciences*, 14(8), 383–88.

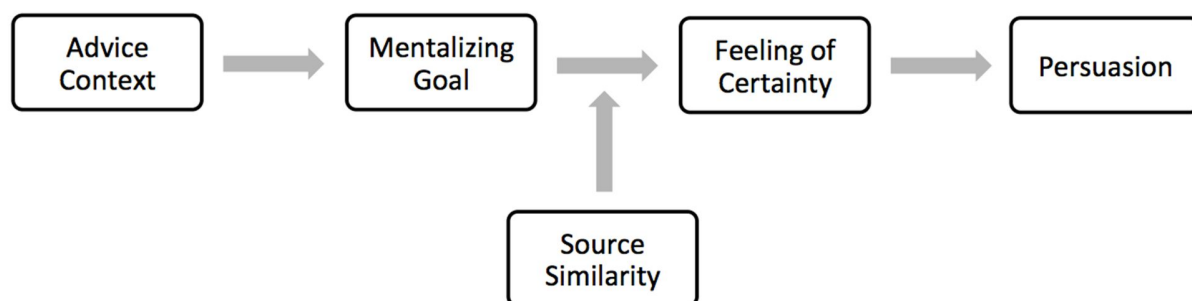
Wilson, Elizabeth J. and Daniel L. Sherrell (1993), "Source Effects in Communication and Persuasion Research: A Meta-analysis of Effect Size," *Journal of the Academy of Marketing Science*, 21(2), 101–12.

Woodside, Arch and J. William Davenport Jr. (1974), "The effect of salesman similarity and expertise on consumer purchasing behavior," *Journal of Marketing Research*, 7, 151–175.

Wyer, Natalie A. (2010), "Selective self-categorization: Meaningful categorization and the in-group persuasion effect," *The Journal of Social Psychology*, 150 (5), 452–470.

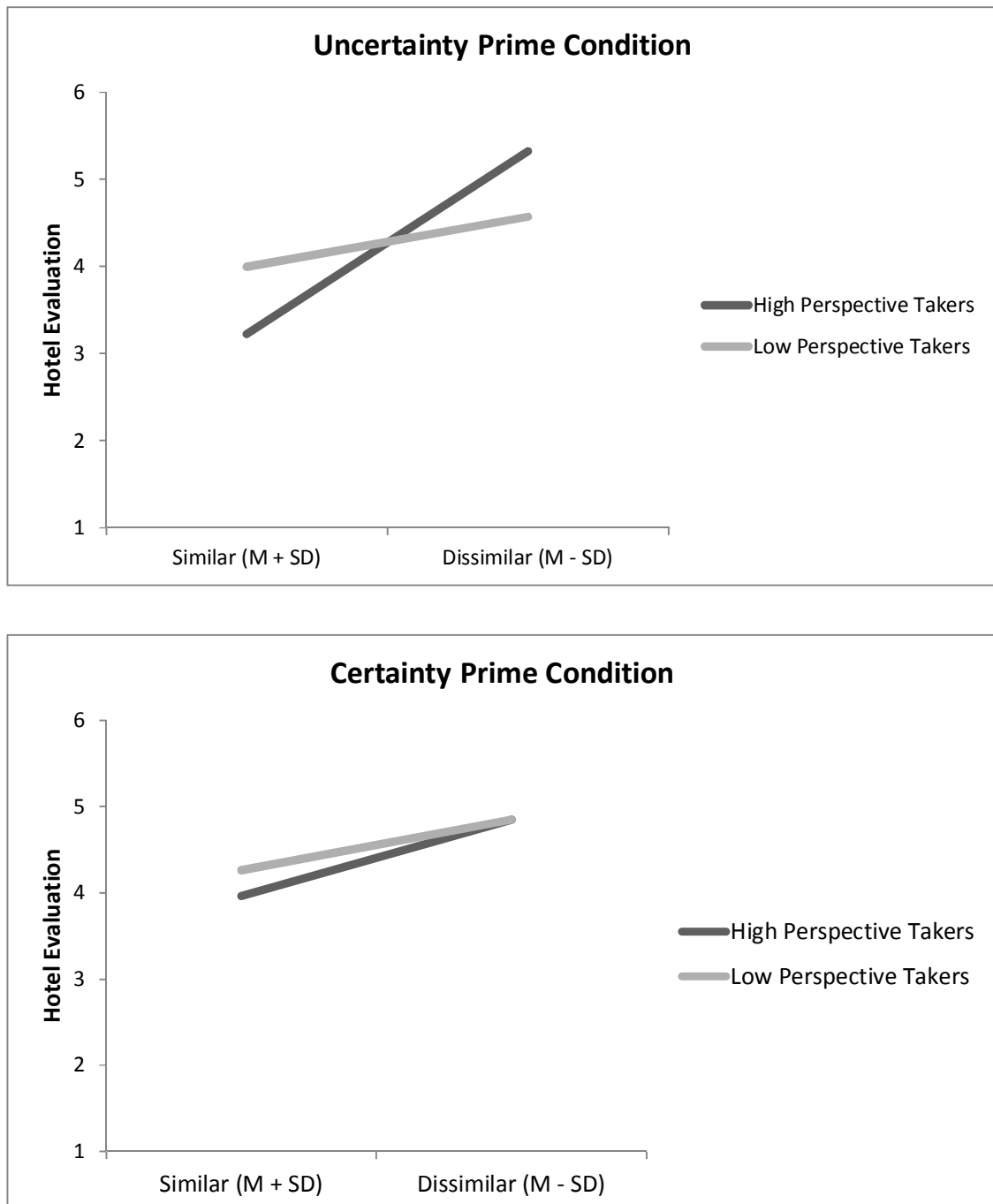
Yaniv, Ilan, Shoham Choshen-Hillel, Maxim Milyavsky (2011), "Receiving advice on matters of taste: Similarity, majority influence, and taste discrimination," *Organizational Behavior and Human Decision Processes*, 115, 111–120.

Zaki, Jamil and Kevin N. Ochsner (2012), "The neuroscience of empathy: progress, pitfalls and promise," *Nature Neuroscience*, 15(5), 675–80.

**FIGURE 1****PROPOSED MODEL**

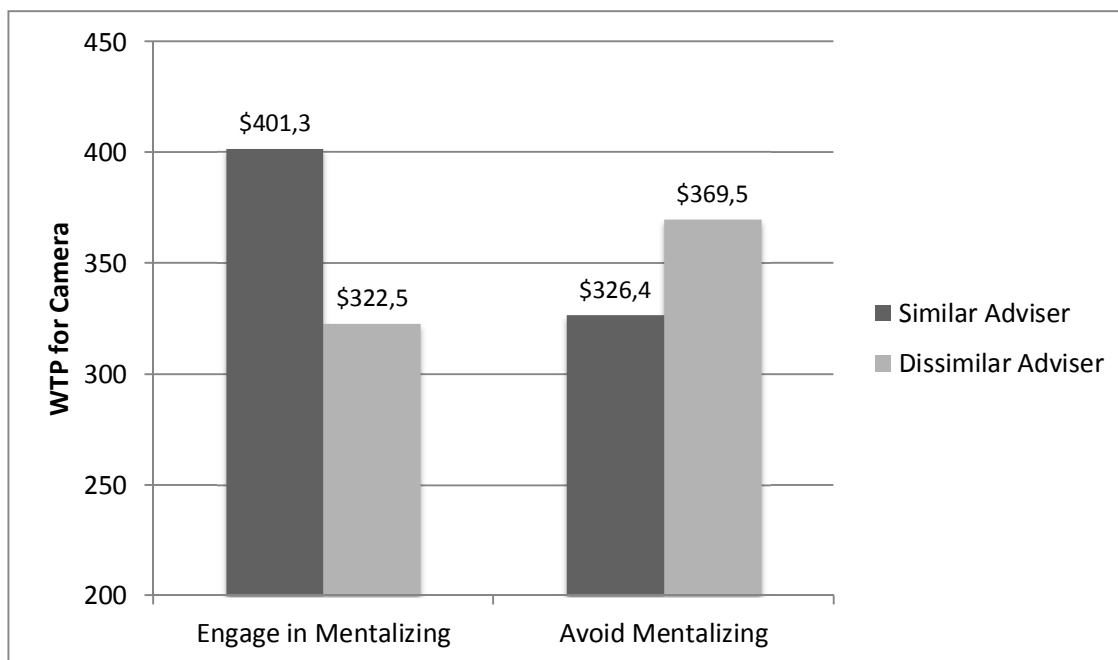
**FIGURE 2**

EFFECT OF UNCERTAINTY PRIME, PERCEIVED SIMILARITY, AND  
PERSPECTIVE-TAKING TENDENCIES ON HOTEL EVALUATION



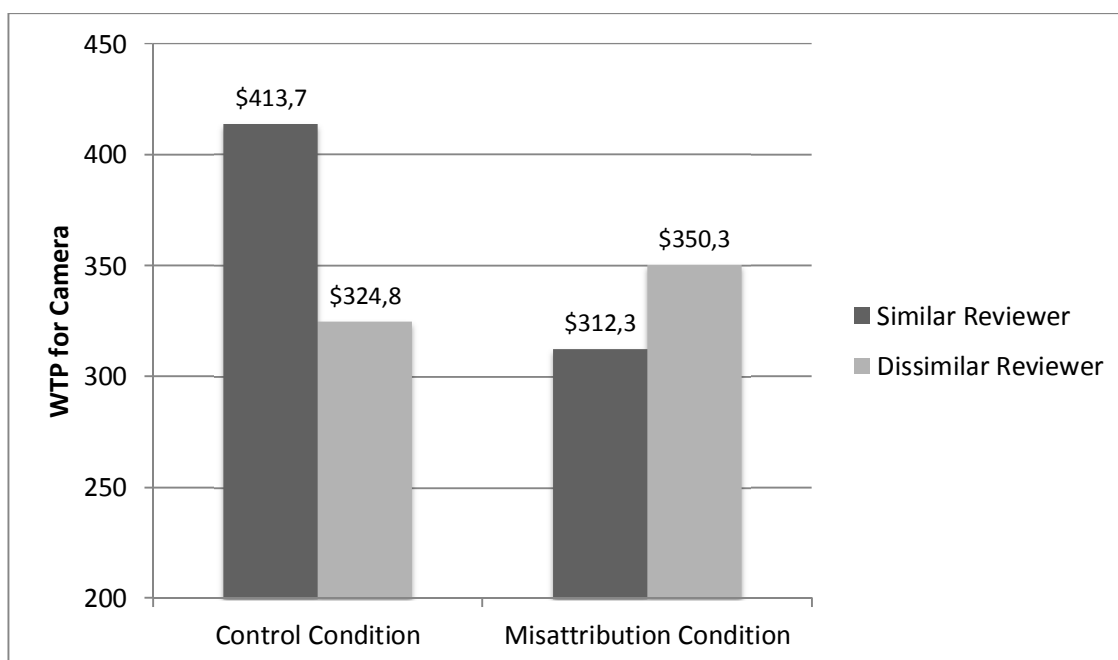
**FIGURE 3**

STUDY 3: EFFECT OF SIMILARITY AND MENTALIZING GOALS ON WTP FOR  
CAMERA



**FIGURE 4**

STUDY 4: EFFECT OF SIMILARITY AND MISATTRIBUTION OF THE FEELING OF  
CERTAINTY ON WTP FOR CAMERA





## Heading List

### **1) PRIOR RESEARCH ON SOURCE SIMILARITY**

#### **1) MENTALIZING, SIMILARITY, AND THE FEELING OF CERTAINTY**

##### 2) Mentalizing

##### 2) Similarity and the Feeling of Certainty

### **1) ISOLATING THE SOURCE-SIMILARITY EFFECT FROM OTHER SOURCE EFFECTS**

#### **1) OVERVIEW OF STUDIES**

##### **1) STUDY 1**

##### 2) Method

##### 3) *Participants and design*

##### 3) *Material and procedure*

##### 2) Results and Discussion

##### 3) *Perceived similarity, expertise, credibility, and trustworthiness of the reviewer*

##### 3) *Persuasion*

##### **1) STUDY 2**

##### 2) Method

##### 3) *Participants and design*

##### 3) *Preliminary phase*

##### 3) *Main phase: Feeling manipulation*

##### 3) *Main phase: Advice task*

##### 2) Results and Discussion

3) *The effect of mentalizing likelihood, uncertainty, and similarity on persuasion*

3) *Do the findings extend to other source characteristics?*

### **1) STUDY 3**

2) Method

3) *Participants and design*

3) *General procedure overview*

3) *Material*

2) Results and Discussion

3) *Perceptions of similarity, expertise, credibility, and trustworthiness*

3) *Likability and perceptions of correlated preferences*

3) *Willingness to pay for the camera*

3) *Feeling of certainty*

3) *Mediating role of the feeling of certainty*

3) *Perceptions of understanding an unrelated poem*

### **1) STUDY 4**

2) Method

3) *Participants and design*

3) *Material and procedure*

2) Results and Discussion

3) *Perceptions of similarity, expertise, credibility, and trustworthiness*

3) *Likability and perceptions of correlated preferences*

3) *Perceptions of understanding the adviser's mental states*

3) *Willingness to pay for the camera*

*3) Subjective validation of the advice*

*3) Need for social connectedness*

# **1) GENERAL DISCUSSION**

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